Baltimore Aircoil Company

January 14, 2003

Mr. G. William Pennington
Chief Energy Efficiency Program Specialist
California Energy Commission
1516 9th Street, MS 28
Sacramento, CA 95814-5512

Subject: **Title 24 Requirements for Third Party Performance Certification of Evaporative Heat Rejection Equipment**

Dear Mr. Pennington,

I appreciate the time you and the other members of the Commission staff spent with us on December 17, 2002 to gain a better understanding of the need for language mandating third party performance certification for evaporative heat rejection equipment in the 2005 Building Standards (Title 24, Part 6) of the California Code.

Baltimore Aircoil Company remains fully in support of the inclusion of such language in the 2005 Building Standards for the reasons we have outlined to you in our previous correspondence. It is our opinion that third party performance certification is the only cost effective means by which end users can be assured of realizing the true thermal performance from a given piece of evaporative heat rejection equipment. Our opinion is not shared Evapco, Inc. as was plainly indicated during our meeting on December 17.

I would like to take this opportunity to summarize the arguments against certification which were raised by Evapco, Inc. and provide a brief response to each:

Argument 1:
CTI Certification adds a significant and unnecessary cost burden to the manufacturer which must ultimately be passed on to the purchaser.

In 2001, Baltimore Aircoil Company's total cost of maintaining CTI certification for our six (6) certified product lines averaged $7,903 per product line. In 2002 this figure averaged $8,788 per product line. These figures include 100% of the administration and testing costs billed by CTI as well as our estimated internal costs of making our labs and a lab technician available to conduct annual capacity verification tests.

P.O. Box 7322 • Baltimore, Maryland 21227 • 7595 Montevideo Road • Jessup, Maryland 20794 • U.S.A.
Telepnone: (410) 799-6200 • Fax: (410) 799-6416 • Web Site: http://www.baltaircoil.com

Although we did not certify any new product lines in either 2001 or 2002, we would have incurred a total additional cost of approximately $3,000 per product line in order to do so.

These total costs associated with CTI Certification represent less than two tenths of one percent of the overall manufactured cost of our certified product lines and are clearly insignificant with respect to the price paid by the purchaser of these products.

Argument 2:
A better proposal to insure evaporative cooling equipment is meeting its stated thermal performance is to give the end user (or any interested party) the right to challenge the manufacturer to allow an authorized third party testing agency conduct a field performance test. If the test proves the stated performance is being met, the challenger pays the cost of the test, if the test proves otherwise, the manufacturer pays for the test and then does whatever is necessary to correct the shortfall.

In reality, this option has always been available to end users through individual project specifications but is rarely, if ever, invoked. The problem with this approach is cost. A CTI authorized testing agency will normally charge $5,000 to $7,000 to test a given piece of equipment, plus travel and expenses. End users will simply not pay such a large fee to prove to themselves that they are getting what they paid for. A manufacturer supplying equipment which is not performing up to published performance levels is likely to proceed without challenge for years, at the detriment of the end user and the power grid.

A requirement for CTI certification will deliver the same assurance to the end user for a negligible cost as demonstrated in Argument 1 above.

Argument 3:
CTI Certification can be misinterpreted by the public as an all-encompassing "industry seal of approval" which extends well beyond the certification of thermal performance. Under such a scenario, an upstart manufacturer could simply have their product line CTI certified and gain unwarranted credibility with regard to such issues such as quality, reliability, and structural integrity.

In the 21 years BAC has been associated with CTI certification program we have never been made aware of a customer misinterpreting the scope CTI certification as anything more than a certification of thermal performance. A number of new entrants to the cooling tower market have had their product lines certified prior to launching them which we believe is a strong endorsement of what the program is designed to do.

Argument 4:
ASHRAE deleted the requirement for CTI certification from Standard 90.1 which is a statement of the industry's reluctance to embrace it.

The deletion of the requirement for CTI certification was based on a perception that evaporative heat rejection manufacturers would be put at a disadvantage versus air-cooled heat rejection manufacturers due to the non-existence of certification programs for remote air-cooled condensers and dry coolers. This logic is not well founded - the vast majority of the competition which evaporative heat rejection equipment (e.g. open cooling towers and closed cooling towers) is subjected to with regard to air-cooled heat rejection equipment is due primarily to *packaged* air-cooled cooling systems such as air-cooled chillers and air-cooled rooftop equipment. The thermal performance of all such packaged air-cooled systems is thermally certified through a variety of ARI certification programs.

Baltimore Aircoil Company is not concerned that the absence of certification programs for remote air-cooled condensers and dry coolers will have an adverse impact on the market for certified evaporative heat rejection equipment. It is our intention to present our rationale for reinstating the requirement for CTI certification in Standard 90.1 to the ASHRAE Standard Project Committee at the earliest opportunity.

Argument 5:
Because only one manufacturer of centrifugal fan cooling towers is CTI certified, a requirement for certification in the 2005 Building Standards will restrict competition for the consumers in California.

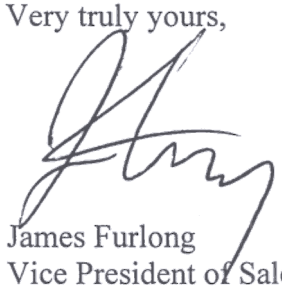
There is no plausible reason why Evapco shouldn't certify their line of centrifugal fan cooling towers (and closed towers as well) if required in the 2005 Building Standards. Evapco has stated that they are confident their products meet their published performance ratings and, as demonstrated in our response to Argument 1, the cost of certifying will be negligible.

Argument 6:
CTI Certification will discourage product innovations because each innovation could require costly and time-consuming re-certification.

All HVAC manufacturers participating in third party certification programs, including CTI and ARI sponsored programs, are subjected to this restraint. We have found it to become an issue only in the rarest of circumstances and of minor consequence when viewed in respect to the overall benefits afforded by certification.

We are still in the process of investigating whether any additional information may be available from CTI or CTI-authorized testing agencies with regard to field test data related to certified and uncertified evaporative heat rejection equipment. In the meantime, please feel free to call me if you need any additional information.

Very truly yours,



James Furlong
Vice President of Sales

Copy to:

B. Alcorn, California Energy Commission
B. Meister, California Energy Commission
D. Mills, California Energy Commission
M. Stanga, Competition Advocates